

ABSTRACT OF THE DISCLOSURE

A process for the preparation of a radiation-sensitive silver halide emulsion comprised of high bromide cubical silver halide grains, the process comprising: (a) providing in a stirred reaction vessel a dispersing medium and high bromide silver halide grain cores, the grain cores comprising at least 5 mole % of the final emulsion silver and the contents of the vessel being maintained at a temperature of at least about 65°C, and (b) precipitating a high bromide silver halide shell which comprises at least 5 mole % of the final emulsion silver onto the grain cores by introducing at least a silver salt solution into the dispersing medium at a specified high rate, wherein a minor percentage of chloride ions, relative to bromide, is introduced into the reaction vessel prior to or concurrent with precipitation of the high bromide shell, and wherein the concentration of silver halide grains in the reaction vessel at the end of the precipitation of the shell is at least 0.5 mole/L. The invention provides an improved manufacturing process for the preparation of high bromide silver halide cubical grain emulsion enabling concentrated emulsion batches to be prepared with desired photographic properties.